

Application No.: 09/858,035

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Docket No.: 297912001911

In the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-40 (canceled)

41. (previously added) An endoluminal prosthesis, comprising an elongate support wire member joined to a polymer cladding, the joined support wire member and polymer cladding being helically wrapped into an open cylindrical structure such that adjacent windings of the polymer cladding have overlapping regions that are bonded to one another.

42. (previously added) The endoluminal prosthesis according to claim 41, wherein the polymer cladding completely surrounds the support wire member along its length.

43. (previously added) The endoluminal prosthesis according to claim 41, wherein the polymer cladding comprises a longitudinally extending recess and wherein the support wire member is positioned within said longitudinally extending recess.

44. (previously added) The endoluminal prosthesis according to claim 41, wherein the polymer cladding comprises a material selected from the group consisting of polytetrafluoroethylene, polyurethane, polyethylene, polypropylene, polyamide, polyimide, polyester, polyfluoroethylenes, silicone, fluorinated polyolefin, fluorinated ethylene/propylene copolymer, perfluoroalkoxy fluorocarbon, ethylene/tetrafluoroethylene copolymer, and polyvinylpyrrolidone.

45. (previously added) The endoluminal prosthesis according to claim 41, wherein the support wire member comprises a material selected from the group consisting of shape memory alloys, biocompatible spring steels, biocompatible spring metal alloys, and carbon fibers.

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46. (previously added) The endoluminal prosthesis according to Claim 41, wherein the support wire member comprises a shape memory alloy with a pre-programmed austenite dimensional state.

47. (previously added) The endoluminal prosthesis according to Claim 41, further comprising an inner and an outer tubular substrate, wherein the joined support wire member and polymer cladding are encapsulated therebetween.

48. (currently amended) The endoluminal prosthesis according to Claim 47, wherein the inner and outer tubular substrates ~~comprises~~ comprise a biocompatible material selected from the group consisting of expanded polytetrafluoroethylene, polyethylene, polyethylene terephthalate, polyurethane, and collagen.

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49. (previously added) The endoluminal prosthesis according to Claim 41, wherein the support wire member is in the form of a planar ribbon.

50. (currently amended) The endoluminal prosthesis according to Claim 41, wherein the polymer cladding has a generally quadrilateral cross-sectional configuration.

51. (new) The endoluminal prosthesis according to Claim 50, wherein the wire member has a quadrilateral cross-sectional configuration.

52. (new) The endoluminal prosthesis according to Claim 41, wherein the wire member has a circular cross-sectional configuration.

53. (new) The endoluminal prosthesis according to Claim 52, wherein the polymer cladding has a circular cross-sectional configuration.

54. (new) The endoluminal prosthesis according to Claim 52, wherein the polymer cladding has a triangular cross-sectional configuration.

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55. (new) The endoluminal prosthesis according to Claim 54, wherein the polymer cladding in cross-section further comprises a hemispherical recess.

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56. (new) The endoluminal prosthesis according to Claim 52, wherein the polymer cladding in cross-section has a main body portion with a circular cross-sectional configuration and at least one projection extending radially outward therefrom.

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